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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, TU X

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,098

Applicant(s)

MCINTOSH ET AL.

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4,5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 7-13 and 16-19, are rejected under 35 U.S.C. 102(e) as being anticipated by Fletcher et al. (US Reg. H1836).

Regarding claim 1, Fletcher et al. disclose a distributed cellular communication system comprising:

a network (100, fig.1);

a public switched telephone network (PSTN) coupled to the network (106, fig.1);

a plurality of transceiver (102) coupled to the network, the plurality of transceivers geographically separated from one another and each configured to communicate over a wireless medium with mobile stations (110) in an associated cell (see col.5 lines 17-52);

at least one data processing system coupled to the network, the at least one data processing system configured to execute computer programs including software functional blocks adapted to enable the plurality of transceivers to communicate data between mobile stations and between a mobile station and the PSTN, the software functional blocks (see col. 7 lines 30-44 and col.9 lines 15-24) including:

a mobility management (MM) functional block to implement MM functions (see col.23 lines 41-42));

a visitor location registry (VLR) functional block to implement VLR functions (see 502, 612, fig.6);

a communication management (CM) functional block to implement CM functions (see col.23 lines 35-41); and

a plurality of radio resources function blocks to implement RR functions including maintaining communication between a mobile station and the network by switching communication among the plurality of transceivers as the mobile station moves from one cell to another cell (see col.23 line 64 through col.24 line 5 and col.6 lines 14-15).

Regarding claim 10, Fletcher et al. disclose everything as claim 1 above. More specifically, Fletcher et al. disclose communication traffic among the base transceiver stations, the base station controllers and the mobile switching center is load-balanced for efficiency (see col.3 lines 7-59).

Regarding claims 2, 12 and 18, Fletcher et al. disclose communications traffic among the transceivers and the software functional blocks is load-balanced to provide increased efficiency (see col.3 lines 40-58).

Regarding claim 7, Fletcher et al. disclose at least one of the plurality of RR functional block is resident on a special purpose data processing system known as a base station controller (BSC) (see col.6 lines 46-64).

Regarding claim 8, Fletcher et al. disclose the data communicated between mobile stations and between a mobile station and the PSTN includes voice communication (see col.9 lines 15-24).

Regarding claim 9, Fletcher et al. disclose each of the plurality of transceivers includes a transceiver and a base transceiver station software functional block resident on a data processing system coupled to the network (col.21 lines 45-67).

Regarding claims 11 and 17, Fletcher et al. disclose each of the network elements is given a predetermined network address and communication traffic is routed to each of the network elements based on the predetermined network address (see col.22 lines 39-54).

Regarding claims 13 and 19, Fletcher et al. disclose if one of the network elements fails, communication traffic is routed to another network element capable of performing the required functions (see col.16 lines 29-48).

Regarding claim 16, Fletcher et al. disclose everything as claim 1 above. More specifically, Fletcher et al. disclose communicating inbound information with a mobile station over a transceiver (see col.18 lines 1-59, "incoming" reads on "inbound").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6, 14-14 and 20-21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. in view of Sallberg (US Pub. 2001/0043588).

Regarding claims 3-5, 14-15 and 20-21, Fletcher et al. disclose ss7 ("ss7" reads on "packet"). However, Fletcher et al. fail to disclose the network is an internet protocol network, and wherein the PSTN is coupled to the IP network via a voice gateway.

Sallberg discloses the network is an internet protocol network, and wherein the PSTN is coupled to the IP network via a voice gateway (see fig.3A). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Fletcher et al. with the above teaching of Sallberg in order to receive incoming calls over the cellular network without disrupting the Internet session.

Regarding claim 6, the modified Fletcher et al. disclose the voice gateway software functional block, the MM functional block and the VLR functional block are resident on a special purpose data processing system known as a mobile service center (MSC) (see Sallberg, 320, fig.3A).

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Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).


April 7, 2004


NAY MAUNG
SUPERVISORY PATENT EXAMINER